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## **Agricultural Employment in Namibia: Not the Engine of Wage Employment Growth**

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**This paper examines trends in national agricultural employment between 1991 and 2000 using official government statistics. It finds that employment in commercial agriculture has fallen, a result which contrasts with estimates from the Agricultural Employers Association. Employment in subsistence agriculture, on the other hand, has increased over the period. There is evidence that employment in informal sector activities in the agriculture sector has also experienced some growth. In total, excluding unpaid family workers, agricultural employment has grown by some 6,800 between 1991 and 2000. Measuring employment in the agriculture sector is particularly difficult given the high degree of seasonality, high levels of family and casual labour, and the effect of weather conditions. This having been said, growth in wage employment in agriculture appears to have fallen far short of the government's national development targets.**

Shortly after independence, Namibia's Transitional National Development Plan (TNDP) identified agriculture as a priority sector for government support. The First National Development Plan (NDP1) maintained agriculture as a priority and boldly aimed to increase agricultural employment by 6,000 in the commercial farming sector and by 30,000 people in the subsistence farming sector between 1994 and 2000. The exact nature of these targets was poorly defined – presumably employment growth was to consist of full-time wage employment in either commercial or communal areas and full-time farming in subsistence agriculture. The Second National Development Plan (NDP2) continues to view agriculture as a priority sector (see the Foreword to NDP2) although it failed to review trends in employment during the NDP1 period in any detail. NDP2 aims to “increase employment by 2.6% a year over the period 1999-2006 at the same rate as population growth” (NDP2, p53). NDP2 stops short of targeting agricultural employment but estimates that primary sector employment is to rise from 160,389 in 1999 to 202,676 in 2006.

This short paper describes trends in national agricultural employment in Namibia between 1991 and 2000 using data from the 1991 Population and Housing Census (1991 PHC) and the Namibia Labour Force Surveys (NLFS) of 1997 and 2000. Table 1 below presents data on agricultural employment from these three sources and includes an estimate for the number of commercial farm workers from the 1993/94 Household Income and Expenditure Survey (HIES).

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## Care needs to be taken when comparing the available statistics...

In making comparisons between these data sources it is worth bearing in mind the following points.

First, a comparison is being made between census and survey data. A census tries to count every member of the population while a survey is based on grossing up data from a sample of the population. If the sample is too small or if there are shortcomings in the method of grossing up, the results of the survey may be misleading.

Second, the 1991 PHC excluded Walvis Bay which had not then been incorporated into the rest of Namibia. However, because agricultural employment is being considered here this is unlikely to create problems since there was and is little subsistence or commercial agricultural activity in Walvis Bay.

Third, the employment figures from the 1991 PHC includes the entire population 10 years and over whereas those from the NLFS's include those 15 years and over. This paper will assume that those between the ages of 10 and 14 years involved in agriculture are overwhelmingly classified as unpaid family workers. If this is not the case, some of the conclusions may not be correct.

Finally, the 1997 and 2000 NLFS's include exactly the same categories of employment status and can therefore be directly compared. However, the categories of employment status used in the 1991 PHC are not as disaggregated as those used in the NLFS. To overcome this the categories from the NLFS have been reordered and grouped in such a way as to make comparison as meaningful as possible as shown in Table 1.

**Table 1: Employed population in agriculture by status in employment**

	'91	'93/94	'97	'97-'91	'00	'00-'97
Employer	3,700		9,913	+6,213	14,498	+4,585
Subsistence/communal with paid employees*			6,288		12,875	
Other employer with paid employees*			3,625		1,623	
Own account worker	62,356		51,463	-10,893	69,476	+18,013
Subsistence/communal without paid employees*			49,583		65,122	
Other own account worker			1,880		4,354	
Employee (government)	1,617		3,044	+1,427	2,730	-314
Employee (private)	38,723	32,613	42,277	+3,554	26,480	-15,797
Unpaid family worker	80,576		39,537	-41,039	10,695	-28,842
Unpaid family worker (subsistence/communal)*			38,125		9,892	
Other unpaid family worker*			1,412		803	
Other	4		295		566	+271
Not stated	143		370		2,014	+1,644
Total	187,119		146,899	-40,220	126,459	-20,440
Total excluding unpaid family workers	106,396		106,697	+301	113,184	+6,487
Total subsistence excluding unpaid family workers	62,356		55,871	-6,485	77,997	+22,126
Total commercial excluding unpaid family workers	44,040		50,826	+6,786	35,187	-15,639

\*categories included in 1997 and 2000 Namibia Labour Force Surveys but not in 1991 Population and Housing Census

Source: Table E15, 1991 Population and Housing Census, CBS, Table 12.1 Living Conditions in Namibia 1993/94, CBS Table 5.3 Namibia Labour Force Survey 1997, Table 5.4 Namibia Labour Force Survey 2000, Ministry of Labour



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## **Employment appears to have fallen in commercial agriculture and risen in communal agriculture...**

Moving downwards from the top row in Table 1 the following observations can be made:

If it is assumed that the category “employer” used in the 1991 PHC refers only to commercial farmers, then it appears that the number of commercial farmers remained constant between 1991 and 1997 (3,700 and 3,625 respectively) before falling by half in 2000 (1,623). This suggests either that a certain amount of consolidation has taken place in commercial farming with fewer farmers owning a more or less fixed number of commercial farms or that farmers have moved into other activities which do not fall into the category agriculture, hunting and forestry such as tourism.

The 1991 PHC did not distinguish between subsistence farmers with paid employees and those without paid employees. The number of subsistence farmers with paid employees doubled from 6,288 in 1997 to 12,875 in 2000. This suggests an important trend is at work whereby increasing numbers of subsistence farmers are paying people to work on their farms.

The number of subsistence farmers without paid employees grew from 49,583 in 1997 to 65,122 in 2000. This compares to a total number of 62,356 own account workers in 1991.

If the number of subsistence farmers with and without paid employees is calculated it appears that the total number of subsistence farmers grew dramatically (by 22,126) between 1997 and 2000. This total is some 15,641 greater than the total number of own account workers from the 1991 PHC.

Between 1997 and 2000 the number of other own account workers more than doubled from 1,880 to 4,354. These are people who are not farmers yet operate their own agriculture-based enterprises. This increase suggests a rise in the number of people involved in informal sector agriculture-based activities such as making and marketing agricultural products.

The total number of government employees working in agriculture (that is to say on government agricultural initiatives rather than in public administration related to agriculture) doubled between 1991 and 1997 but then fell.

The total number of private employees comprises commercial farm workers. From the four available data points (estimates from the 1993/94 Household Income and Expenditure Survey are included here) it appears that the number of commercial farm workers fell between 1991 and 1993/94 and then rose steeply to 42,277 in 1997 before falling to 26,480 in 2000. One possible explanation for this fluctuation could be the high degree of seasonality of much of the commercial agriculture sector. However, the long-term trend seems to be down with the 1997 result an outlier.

The number of unpaid family workers falls sharply between 1991 and 1997 but this is likely to be due to the exclusion of 10 to 14 year olds in the 1997 NLFS. However, a further steep fall is apparent between 1997 and 2000, especially on subsistence farms. One possible explanation may be that a greater number of children 15 and over are staying longer in the school system and therefore spend less time working on the family farm.

At first glance it looks as if the total number of individuals employed in agriculture has fallen sharply and consistently between 1991 and 2000. However, excluding unpaid family workers and insignificant categories, the best official estimates suggest that the total number of people working



in agriculture remained almost identical between 1991 and 1997 at approximately 106,000 individuals but rose by over 6,000 to 113,186 between 1997 and 2000. It could therefore be argued that the government's agricultural policies have succeeded in creating 6,788 jobs in agriculture in the nine years between 1991 and 2000. These jobs have been created in subsistence agriculture.

### **There are considerable differences with other data sources...**

Table 2 presents information from the annual survey of communal agriculture carried out by the Central Bureau of Statistics and compares this with estimates from Table 1. It shows the estimated total number of households engaged in subsistence farming in the six northern communal regions of Caprivi, Kavango, Ohangwena, Omusati, Oshana and Oshikoto. The survey excludes the small number of communal farmers that are to be found elsewhere in the country. It is to be expected that some relationship exists between the number of households engaged in communal farming and the number of subsistence farmers. In theory one would expect the number of workers to vastly outnumber the number of households since each household may be expected to supply a number of farm workers. Furthermore, one might also expect that each individual categorised as a subsistence farmer would operate at most one subsistence farm or holding. The number of households with holdings may therefore correspond reasonably well with the number of subsistence farmers excluding unpaid family workers.

**Table 2: Households engaged in communal farming**

	<b>1996/97</b>	<b>1997/98</b>	<b>1998/99</b>	<b>1999/2000</b>
Number of households with holdings	102,356	101,207	101,624	81,769
Subsistence farmers with paid employees	6,288	N/a	N/a	12,875
Subsistence farmers without paid employees	49,583	N/a	N/a	65,122
Total number of subsistence farmers	55,871	N/a	N/a	77,997

*Source: 1999/2000 Annual Agricultural Survey, CBS, and Namibia Labour Force Surveys 1997 and 2000*

In 1996/97 there were almost twice as many households with holdings as there were subsistence farmers. It is hard to believe that on average each subsistence farmer belonged to two households. Far more likely is that it is those workers from the household under the age of 15 that were active members of the household. It may also be that the number of subsistence farmers in the 1997 NLFS was underestimated for there appears little convincing evidence to explain why the number suddenly dipped and then rose. The estimates for 1999/2000 match far more closely due to a mysterious sharp fall in the number of households with holdings of about 20,000 following three years where the number had remained more or less constant.

Table 3 presents information from surveys carried out by the Agricultural Employers Association (AEA), an organisation affiliated to the Namibia Agricultural Union (NAU) which represents some 1,500 to 2,500 commercial farmers. The bi-annual survey is based on a questionnaire mailed to all NAU members. It has a response rate of between 15% and 25%. It may be biased towards larger commercial farmers (who have more resources to respond to such surveys) and those with better labour practices (who are less afraid of providing such information to others). The survey shows that the average number of farm workers per farm, especially permanent farm workers, increased between 1996 and 2000, a contrasting and much rosier picture compared to the one painted above. However, it is possible that the average number of farm workers per farm increases even



though the total number may fall if a process of farm consolidation (and therefore AEA members) has taken place.

**Table 3: Average number of farm workers per commercial farm**

<b>Category</b>	<b>Sex</b>	<b>1996</b>	<b>1998</b>	<b>2000</b>
Permanent workers	Male	4.7	5.2	5.7
	Female	1.1	1.4	1.2
Temporary workers	Male	0.5	1.0	1.2
	Female	0.3	0.8	0.4
Casual workers	Male	0.2	0.2	0.2
	Female	0.1	0.2	0.1
Contract workers	Male	0.8	1.4	1.6
	Female	0.3	0.4	0.7
All categories		8.0	10.6	11.1

Source: Agricultural Employers Association

### **Value added per worker has risen in commercial agriculture but fallen in subsistence agriculture...**

Table 4 presents estimates for output per worker in the agricultural sector. The value added, that is to say the total income generated, from commercial and subsistence farming in 1991, 1997 and 2000 measured in 1995 prices has been divided by the number of workers in the sector excluding unpaid family workers. It suggests that labour productivity fell then increased in commercial agriculture but increased then fell in subsistence agriculture. In 2000 value added per worker in subsistence agriculture was less than one third that of commercial agriculture.

**Table 4: Value added per agricultural worker**

	<b>1991</b>	<b>1997</b>	<b>2000</b>
Commercial agriculture value added (N\$m in 1995 prices)	597	519	648
Subsistence agriculture value added (N\$m in 1995 prices)	365	407	408
Number of workers in commercial agriculture	44,040	50,826	35,187
Number of workers in communal agriculture	62,356	55,871	77,997
Value added per worker in commercial agriculture (N\$ per worker)	13,556	10,211	18,416
Value added per worker in subsistence agriculture (N\$ per worker)	5,853	7,285	5,231

Source: National Accounts, CBS, 1991 PHC, NLFS 1997 and 2000

### **All in all it is difficult to argue that present agriculture policies have led to significant employment growth...**

This paper has used four official data sources to explore trends in agricultural employment between 1991 and 2000. It has compared this data with data from other sources. Given the problems of comparability between data sources and the high degree of seasonality that



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agriculture exhibits, it is perhaps advisable not to read too much into the data. The picture should become clearer when the results of the 2001 Population and Housing Census are published.

Agricultural employment is a highly complex issue which is hard to quantify for a variety of reasons. Unpaid family labour and casual labour are often very important. On farms producing crops, employment is highly seasonal coinciding with planting and harvesting. Production is often not for the market but for own consumption so a monetary value of employment income is hard to measure. For these reasons, countries often focus on non-farm labour measures of employment and unemployment growth. Given our level of analysis it is hard to speculate on which factors have driven agricultural employment since a large range of factors have probably contributed to change including labour regulations, investment conditions and capital intensity, trade and pricing policies, HIV/AIDS, environmental conditions, educational access and school enrolment, and general rural-to-urban migration. These complex issues require further investigation.

For the time being, however, excluding unpaid family workers, the available evidence suggests that in total about 6,800 employment opportunities were created in Namibia's agricultural sector in the period between 1991 and 2000 and that these were in subsistence farming. The commercial farming sector appears to have shed labour and the number of employers has declined. Value added per paid worker appears to have risen as a result. The subsistence farming sector appears to have substituted unpaid family workers for paid workers but value added per worker appears to have fallen. There is evidence that the number of people involved in informal sector activities based on agriculture has grown.

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